CENTERS FOR CHILDREN'S ENVIRONMENTAL HEALTH AND DISEASE PREVENTION RESEARCH

Answers to Frequently Asked Questions (FAQs)
for RFA ES-03-004

Citations below refer to pagination in the RFA as posted at:
http://grants1.nih.gov/grants/guide/rfa-files/RFA-ES-03-004.html

1. ***Where can I find more information on the Centers for Children's Environmental Health and Disease Prevention Research RFA?***

   Current information on all aspects of the Centers for Children's Environmental Health and Disease Prevention Research can be found at the following website:

   http://www.niehs.nih.gov/translat/children/pre-app.htm

2. ***How are you defining "Environmental Health?"***

   Environmental Health, in its broadest sense, comprises those aspects of human health, disease, and injury that are determined or influenced by factors in the environment. This includes not only the study of the direct pathological effects of various chemical, physical, and biological agents, but also the effects on health of the broad physical and social environment, which includes housing, urban development, land-use and transportation, industry, and agriculture. (**Healthy People 2010**)

3. ***What do NIEHS and EPA expect the Centers to do?***

   Centers will develop innovative strategies to measure relevant environmental exposures in children, and conduct multidisciplinary basic and applied research in combination with community-based research to reduce hazardous exposures and their adverse health effects, and eventually decrease the prevalence, morbidity, and mortality of environmentally related childhood diseases. They will also actively pursue the translation and application of these findings by developing and implementing strategies that get this information out into the public health community.

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Program Website http://www.niehs.nih.gov/translat/children/children.htm

4. What is the purpose of these awards?

The purpose of these awards is to:

- Provide for multidisciplinary interactions among basic, clinical, and behavioral scientists interested in establishing outstanding, state-of-the-art research programs addressing environmental contributions to children's health and disease.
- Support a coordinated program of research/prevention Centers pursuing high quality research in environmental aspects of children's disease, with the ultimate goal of facilitating and accelerating translation of basic science knowledge into clinical applications or intervention strategies that can be used to reduce the incidence of environmentally related diseases in childhood.
- Develop fully coordinated programs that incorporate exposure assessment and health effects research with development and validation of risk management and health prevention strategies.
- Encourage the translation and application of research findings to the prevention and clinical decision making arenas and give information to the communities and policy makers that most need it to protect children's health.
- Establish a national network that fosters communication, innovation, and research excellence with the ultimate goal of reducing the burden of morbidity among children as a result of exposure to harmful environmental agents.

5. What is the focus of the continuing program?

The program will focus on:

- Impact of environmental exposures on the etiology and prevention of prevalent disorders in children
- Exploring the unique susceptibilities of children that put them at risk of developing illness in early life, such as, but not limited to:
    - genetic susceptibility
    - susceptibility due to poverty and poor nutritional status
    - increased risk due to strained social and behavioral supports and inadequate access to health care
- Creating and implementating strategies that will move the research from the experimental and population laboratory to the prevention and clinical decision making arenas and to the general public.

6. What are the major goals of the program described in the RFA?

The long-range goals of this program are twofold:

- To stimulate new and expand on existing research on the role of environmental exposures in the etiology and prevention of prevalent disorders in children, and

- To promote translation of basic research findings into applied intervention and prevention methods, thereby enhancing awareness among children, their families, and health care practitioners regarding detection, treatment, and prevention of environmentally related diseases and health conditions.

7. What scientific approaches are acceptable for this application?

A spectrum of scientific approaches is expected to create a truly multidisciplinary working environment where experimental research can inform population-based research and vice versa. These disciplines should include: mechanistic research including pathophysiology of target-organ system; toxicological research; molecular and cellular sciences; clinical research; and public health research including epidemiology; exposure assessment and remediation; behavioral sciences; economic; and social policy research.

8. Are there specific childhood health outcomes and disease endpoints that will be considered responsive to the RFA?

Respiratory Diseases
It is important to gain further insight into how Particulate and gaseous pollutants, volatile organic compounds and biological agents active in the environment work singularly or collectively to produce respiratory disease in young children. The importance of exposures to these agents and their interaction with genetic and other susceptibility factors is the primary topic of interest for the development of research proposals for this competition.

Childhood Neurodevelopment and Learning
Continued research on toxic effects associated with low-level developmental exposure to these contaminants is needed. Enhancing our understanding of the pathways by which these contaminants exert their toxic action may result in development of more effective interventions. Effects of intrauterine exposure to environmental hazards are of interest, including changes that occur in maternal biokinetics during pregnancy and determinants of placental transport and fetal accumulation of toxicants.

Organ System Development and Pathobiology
The timing of exposures and their cellular and molecular consequences should be carefully considered in research that seeks to understand the relationship between susceptibility factors, environmental exposures and risk of a variety of childhood cancers. Another area that merits research attention in both basic and applied science is sexual development. Other new areas might include birth defects and childhood cancer.

9. What funding mechanisms are being used for this RFA?

This RFA will use the National Institutes of Health (NIH) Program Project Grant (P01) and the Environmental Protection Agency's (EPA) Office of Research and Development, STAR (Science to Achieve Results) program administered in accordance with 40 CFR Part 30 and 40. Responsibilities for the planning, direction, and execution of the proposed project will be solely that of the applicant.

10. What must each Center include?

At a minimum, each Center application must include:

- One laboratory based scientific research project focusing on mechanism, which may include pathophysiological organ system studies, toxicological research, molecular and cellular sciences, and/or clinical research.
- One community-based participatory research project. This project can include etiologic health effects, exposure assessment or intervention/prevention research.
- At least one other research project chosen from among the following disciplines: epidemiology, exposure assessment and remediation, behavioral sciences, economic, and social policy research. These projects can be designed to be multidisciplinary or singular in scientific focus.
- An Administrative Core. (see question 12)
- A Community Outreach and Translation Core. (see question 12)

11. Are there other requirements for this RFA?

- Must have established relationship with a community based organization
  - Information dissemination to community at least once per year
- External advisory board
- New investigator
  - Must partially support at least one newly recruited scientist
  - Duration of support is two years
- Attendance at the annual grantee meeting
- Quality assurance plan

12. What will be the function of the Cores cited in the RFA?

Administrative Core

Provides overall oversight, coordination, and integration of Center activities.

Community Outreach and Translation Core (COTC)

The purpose is to develop, implement and evaluate strategies to translate and apply the scientific findings of the Center into information for the public, policy makers,

and clinical professionals to use to protect the health of children. This core should include personnel from the following areas: health educators, nurses, members of community or faith-based organizations, members of organizations which advocate for research and services pertaining to children's illnesses, members of professional societies of health care professionals, and state and local health departments or medical service organizations. Examples of activities that could be conducted would be the creation of training materials for health professions, novels strategies for dissemination of research findings to the broad audience of stakeholders, and focus groups to assess community understanding of research results and plans for action. (It is anticipated that a Center will devote up to 10 percent of its budget to the COTC.)

Facility Core

Provide a technique, service, or instrumentation that will enhance ongoing research efforts. Examples of such facilities are animal resources, cell/tissue culture, pathology, biostatistics, molecular biology, neuropsychology, neuroimaging, analytical chemistry, exposure assessment, survey analysis, etc. It should be noted that exposure assessment as a service within a facility core differs in depth and scope from the basic research of an exposure assessment research project. An exposure assessment facility core supports the measurement aspects of an epidemiologic or other field study by collecting specimens and measuring chemical analytes or other biomarkers of exposure to assess environmental levels or human body burden of exposures of interest. This core should be involved in quality assurance and/or quality control aspects of exposure analysis activities.

13. Who should be included in each Research Center?

Centers are made of a multidisciplinary team of experts that reflect the scientific theme of the Center. Therefore, the following groups of people should be involved in the Center: Researchers, Community-based/Faith-based Organization members, and, when appropriate, State/Local Health Department officials.

14. What kind(s) of organizations can apply for the RFA?

- The policy applicable to this RFA appears on page 9 of the RFA under "Eligible Institutions" and include:
  - For-profit or non-profit organizations,
  - Public or private institutions, such as universities, colleges, hospitals, and laboratories,
  - Units of State and local governments,
  - Eligible agencies of the Federal government, and
  - Domestic institutions.
- Although applications will not be accepted from foreign institutions, foreign institutions may establish sub-contract arrangements with domestic applicant institution.